QUIZZES

Practice Test-1 (Homeostasis)

10 Questions

7 min

Topics

Mechanism of Homeostasis (Receptors, Control center, Effectors), Osmoregulation, Nitrogen conatining excretory products

06 : 58

Q 1/10 7 min Hint

Q : Detection of change and signaling for effector's response to control system is:

A Homeostatic mechanism

B Feedback mechanism

C Precursor mechanism

D Hormonal mechanism

06 : 57

Q 2/10 7 min Hint

Q : The protection of internal environment from the harms of fluctuations in external environment is termed as:

A Osmoregulation

B Homeostasis

C Negative feedback

D Haemopoisis

06 : 56

3/10 7 min Hint

Q : The mechanism of regulation, generally between organism and its environment, of solute and the gain and loss of water is:

A Osmoregulation

B Homeostasis

C Thermoregulation

D Excretion

06 : 55

Q 4/10 7 min Hint

Q : Osmoregulation is the regulation of:

A

B

C

D

06 : 54

Q 4/10 7 min Hint

Q : Osmoregulation is the regulation of:

A Water only

B Organic solutes only

C Inorganic solutes only

D Water, organic & inorganic solutes

06 : 52

Q 5/10 7 min Hint

Q : It is central requirement for survival of all organisms:

A Reproduction

B Photosynthesis

C Homeostasis

D Locomotion

06 : 51

6/10 7 min Hint

Q : Thermoregulation is maintenance of temperature:

A At fixed point

B In a wide range

C According to external temperature

D Within tolerable range

06 : 50

Q 7/10 7 min Hint

Q : If a cell is placed in hypotonic external environment, then there will be:

A Entry of water into the cell

B Entry of salts into the cell

C Concentration of cell solution

D Dilution of external environment

06 : 47

Q 8/10 7 min Hint

Q : _____ have adaptations for the reduced rate of transpiration.

A Hydrophytes

B Mesophytes

C Halophytes

D Xerophytes

06 : 46

Q 9/10 7 min Hint

Q : Some xerophytes, during the driest season, shed their leaves to:

A Restrict transpiration partially

B Restrict transpiration completely

C Promote transpiration partially

D Promote transpiration completely

06 : 45

Q 10/10 7 min Hint

Q : If 1000 ml water is required to remove N_2 in the form of ammonia then how much water will be required to remove same quantity of N_2 in the form of urea:

A 50ml

B 100ml

C 500ml

D 200ml

Correct | Unattempted

Incorrect | 1/10

Q : Detection of change and signaling for effector's response to control system is:

A Homeostatic mechanism

B Feedback mechanism

C Precursor mechanism

D Hormonal mechanism

Explanation

The target of homeostasis is to maintain the internal environment within a narrow range and it is mostly done through feedback mechanism in which response is initiated or modified by detecting changes by receptors or effectors.

Correct | Unattempted

Incorrect | 2/10

Q : The protection of internal environment from the harms of fluctuations in external environment is termed as:

A Osmoregulation

B Homeostasis

C Negative feedback

D Haemopoisis

Explanation

The maintenance of internal environment from harms of the fluctuations of external environment is done by removing wastes, maintaining body temperature and concentration of salts and water.

Correct | Unattempted

Incorrect | 3/10

Q : The mechanism of regulation, generally between organism and its environment, of solute and the gain and loss of water is:

A Osmoregulation

B Homeostasis

C Thermoregulation

D Excretion

Explanation

Homeostasis involves regulation of temperature, regulation and removal of wastes and osmotic regulation of body by maintaining salt and water concentration.

Correct | Unattempted

Incorrect | 4/10

Q : Osmoregulation is the regulation of:

A Water only

B Organic solutes only

C Inorganic solutes only

D Water, organic & inorganic solutes

Explanation

Osmoregulation is the maintenance of osmotic balance of body which involves regulating water and solutes.

Correct | Unattempted

Incorrect | 5/10

Q : It is central requirement for survival of all organisms:

A Reproduction

B Photosynthesis

C Homeostasis

D Locomotion

Explanation

It is most important for the survival of an organism to maintain its internal environment in its narrow range so that all of the body parts keep working.

Correct | Unattempted

Incorrect | 6/10

Q : Thermoregulation is maintenance of temperature:

A At fixed point

B In a wide range

C According to external temperature

D Within tolerable range

Explanation

Homeostasis is the maintenance of internal environment of body within a tolerable range.

Correct | Unattempted

Incorrect | 7/10

Q : If a cell is placed in hypotonic external environment, then there will be:

A Entry of water into the cell

B Entry of salts into the cell

C Concentration of cell solution

D Dilution of external environment

Explanation

Water always moves from higher water potential to lower water potential. Presence of solutes decreases water potential.

Correct | Unattempted

Incorrect | 8/10

Q : _____ have adaptations for the reduced rate of transpiration.

A Hydrophytes

B Mesophytes

C Halophytes

D Xerophytes

Explanation

Xerophytes face extreme scarcity of water so they are adapted to prevent water shortage. They have needle like leaves with waxy cuticle, stomata in lower epidermis and in depression.

Correct | Unattempted

Incorrect | 9/10

Q : Some xerophytes, during the driest season, shed their leaves to:

A Restrict transpiration partially

B Restrict transpiration completely

C Promote transpiration partially

D Promote transpiration completely

Explanation

Xerophytes face extreme scarcity of water so they are adapted to prevent water shortage by reducing transpiration. During driest conditions, they shed their leaves to reduce rate of transpiration.

Correct | Unattempted

Incorrect | 10/10

Q : If 1000 ml water is required to remove N_2 in the form of ammonia then how much water will be required to remove same quantity of N_2 in the form of urea:

A 50ml

B 100ml

C 500ml

D 200ml

Explanation

Removal of urea requires ten times less water than it is required to remove equal amount of ammonia.

QUIZZES

Practice Test-2 (Homeostasis)

10 Questions

7 min

Topics

Excretory System of Humans, Structure and Functions of Kidney, Nephron, Renal Disorders, Classification of Animals based on Thermoregulation, Thermoregulation in Human

Start Quiz

06 : 59

Q 1/10 7 min Hint

Q : Bilirubin is produced as a result of breakdown of:

A Proteins

B Nucleic acids

C Protein part of hemoglobin

D Non-protein part of hemoglobin

06 : 58

2/10 7 min Hint

Q : Primary structures for eliminating waste products in our body are:

A Liver & pancreas

B Kidneys & skin

C Intestine & lungs

D Liver & kidneys

06 : 57

3/10 7 min Hint

Q : Weight of kidneys accounts for less than _____ of the total body weight.

A 1%

B 2%

C 10%

D 20%

06 : 55

Q 5/10 7 min Hint

Q : Previously employed procedure to remove kidney stones is:

A Lithotripsy

B Surgery

C ESWL

D Dialysis

06 : 56

Q 4/10 7 min Hint

Q : These are specifically instrumental in the production of concentrated urine:

A Cortical nephrons

B Juxtamedullary nephrons

C Collecting ducts

D Renal pelvis

06 : 54

6/10 7 min Hint

Q : Lithotripsy is involved in removal of stone from kidney through:

A Surgery

B Radiations

C Medicines

D Dialysis

06 : 53

7/10 7 min Hint

Q : Point out the correct option:

A Bat – Heterotherms

B Flying insects – Ectotherms

C Frog – Endotherms

D Humming bird - Endotherms

06 : 50

8/10 7 min Hint

Q : Which of the following has main role in homeostasis of body temperature?

A Kidneys

B Skin

C Lungs

D Bones

06 : 49

9/10 7 min Hint

Q : Renal corpuscles can be divided into:

A Arteriole and glomerulus

B Arteriole and Bowman's capsule

C Renal pyramidsAfferent and efferent arteriole

D Bowman's capsule and glomerulus

06 : 48

Q 10/10 7 min Hint

Q : Which of the following represent capillary network of nephrons?

A Bowman's capsule & glomerulus

B Proximal & distal convoluted tubules

C Afferent & efferent vessels

D Glomerulus & vasa recta

Correct | Unattempted

Incorrect | 1/10

Q : Bilirubin is produced as a result of breakdown of:

A Proteins

B Nucleic acids

C Protein part of hemoglobin

D Non-protein part of hemoglobin

Explanation

Bilirubin is produced due to metabolism of haem group of hemoglobin.

Correct | Unattempted

Incorrect | 2/10

Q : Primary structures for eliminating waste products in our body are:

A Liver & pancreas

B Kidneys & skin

C Intestine & lungs

D Liver & kidneys

Explanation

Primary waste product in urine of human is urea which is produced through urea cycle.

Correct | Unattempted

Incorrect | 3/10

Q : Weight of kidneys accounts for less than _____ of the total body weight.

A 1%

B 2%

C 10%

D 20%

Explanation

Weight of human kidneys counts less than 1% of the total body weight while receives 20% of blood supplies with each cardiac beat.

Correct | Unattempted

Incorrect | 4/10

Q : These are specifically instrumental in the production of concentrated urine:

A Cortical nephrons

B Juxtamedullary nephrons

C Collecting ducts

D Renal pelvis

Explanation

The nephrons which have loop of Henle extended deep into medulla will be involved in the formation of concentrated urine because of concentrated interstitial surroundings.

Correct | Unattempted

Incorrect | 5/10

Q : Previously employed procedure to remove kidney stones is:

A Lithotripsy

B Surgery

C ESWL

D Dialysis

Explanation

Modern techniques like lithotripsy have replaced the conventional methods of surgery.

Correct Unattempted

Incorrect 6/10

Q : Lithotripsy is involved in removal of stone from kidney through:

A Surgery

B Radiations

C Medicines

D Dialysis

Explanation

High concentration of X-rays or ultrasound are directed from a machine outside of the body to the stone inside. The shock waves break the stone in tiny pieces or into sand which are passed out of the body through urine.

Correct | Unattempted

Incorrect | 7/10

Q : Point out the correct option:

A Bat – Heterotherms

B Flying insects – Ectotherms

C Frog – Endotherms

D Humming bird - Endotherms

Explanation

Heterotherms are those animals which are capable of varying degrees of endothermic heat production but generally do not regulate their body temperature within a narrow range. For example bats, humming birds etc.

Correct | Unattempted

Incorrect | 8/10

Q : Which of the following has main role in homeostasis of body temperature?

A Kidneys

B Skin

C Lungs

D Bones

Explanation

Body temperature when increased is brought back to normal by evaporative cooling and a decreased body temperature is dealt with preventing peripheral heat loss.

Correct | Unattempted

Incorrect | 9/10

Q : Renal corpuscles can be divided into:

A Arteriole and glomerulus

B Arteriole and Bowman's capsule

C Renal pyramidsAfferent and efferent arteriole

D Bowman's capsule and glomerulus

Explanation

Renal corpuscle is involved in filtration of blood (Glomerulus + Bowman's capsule).

Correct | Unattempted

Incorrect | 10/10

Q : Which of the following represent capillary network of nephrons?

A Bowman's capsule & glomerulus

B Proximal & distal convoluted tubules

C Afferent & efferent vessels

D Glomerulus & vasa recta

Explanation

Blood enters renal corpuscle by afferent arteriole which divides into capillaries and leaves via efferent arteriole which further divides and subdivides into capillaries that supply blood to the tubular parts of nephron.